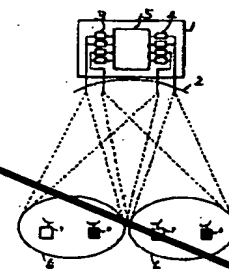
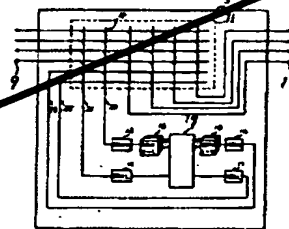


**(54) SWITCHING DEVICE FOR MOUNTING ON SATELLITE IN SS-TDMA SATELLITE COMMUNICATION SYSTEM**

(11) 60-261232 (A) (43) 24.12.1985 (19) JP  
 (21) Appl. No. 59-116531 (22) 8.6.1984  
 (71) NIPPON DENSHIN DENWA KOSHA (72) YOSHIHARU YAMAZAKI(2)  
 (51) Int. Cl. H04B7/15, H04J3/00

**PURPOSE:** To offer two kinds of service having high transmission speed and low transmission speed, to two beam areas and improve efficiency of use of the system by mounting plural receivers and transmitters on a satellite and controlling each receiver and transmitter by a switching device.

**CONSTITUTION:** A switching device 5 and four receivers 3 and 4 transmitters 4 are mounted on a satellite 1, and connection mode between beams of earth station is switched in fixed order by an IR switch matrix 11 of the device 5 repeating in basic frame period. In addition to input and output terminals 9, 10 connected to the receivers 3 and transmitters 4, a part of input and output terminals 20, 21 and 22, 23 of the matrix connected to a time division switching circuit 19 are provided in the matrix 11. Receivers and transmitters 3, 4 are controlled by the device 5, and two kinds of services having high transmission speed and low transmission speed, are offered to two beam areas of the antenna 2, and efficiency of use of the system is improved.



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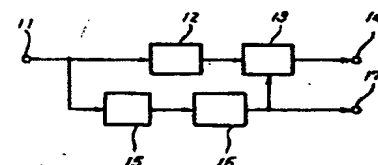
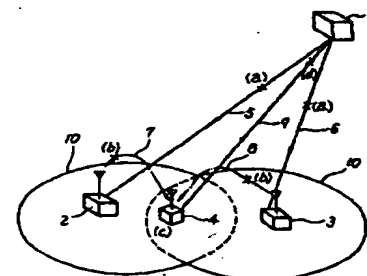


**(54) DETECTING SYSTEM OF CONTROL CHANNEL DISTURBING WAVE**

(11) 60-261233 (A) (43) 24.12.1985 (19) JP  
 (21) Appl. No. 59-116582 (22) 8.6.1984  
 (71) NIPPON DENSHIN DENWA KOSHA (72) ATSUSHI MURASE(2)  
 (51) Int. Cl. H04B7/26, H04B17/00

**PURPOSE:** To watch generation of disturbing wave at all times without interrupting service and improve the capacity of the system by making each base station stop transmission of control signals periodically and simultaneously and detecting the disturbing wave during the while.

**CONSTITUTION:** Control signals of the same radio frequency are simultaneously transmitted from plural base stations 2, 3 having respective radio zone 10 by control of a circuit control station 1 of a mobile radio communication system. The control signals are received by a control channel receiving station 4 and presence or absence of disturbing wave is detected. The result of detection is transferred to the control station 1 by a fixed circuit 9. Control signals are inputted by repeaters 12 of base stations 2, 3, and output of the repeaters 12 is applied to an output gate 13 of the signals. The control signals are processed by a synchronism detector 15 and a bit counter 16, and the gate 13 is controlled by the output. Transmission of control signals is stopped by base stations 2, 3 periodically and simultaneously, and disturbing wave is detected during the while. Thus, disturbing wave is watched at all times without interrupting service.



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